Amendment dated July 23, 2009
Response to Office Action dated March 23, 2009

REMARKS

Applicants thank the Examiner for the Office Action of March 23, 2009. This Amendment is in full response thereto. Thus, Applicants respectfully request continued examination and allowance of the application.

Claims 15-27 are pending in this application.

Claim Rejections Under 35 U.S.C. § 112:

Claim 28 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has canceled the claim thereby mooting the rejection.

Claim 17 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended the claim to replace the word "long" with "woven". As such, Applicant asserts that the metes and bounds of the claim are sufficiently clear to one of ordinary skill in the art and the rejection should be withdrawn.

First Claim Rejection Under 35 U.S.C. § 102

Claims 15-18 and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Goel (US Pub. No.: 2004/0115489). Applicant respectfully traverses because Goel fails to disclose, teach, or suggest each of the claim limitations.

Claim 15 is drawn to a device for transferring water and heat between a first and a second air flow. It comprises a stack of at least two transfer subassemblies having a lamellar configuration. Each of the transfer subassemblies comprises a transfer structure. The transfer structure has hydrophilic porous materials arranged between first and second structures. The first structure is for distributing a first air flow. The second structure is for distributing the second air flow.

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With respect to each of claims 15-18 and 23-27, in order to address the required hydrophilic materials arranged between first and second structures for distributing first and second air flows, the Examiner points to the membrane 33 between a flow of oxygen-depleted exhaust gas 25 and oxidant/dry air 31 (paragraphs 76, 78). However, Goel does not disclose, and one of ordinary skill in the art would not recognize that it even implicitly discloses, first and second structures for distributing first and second air flows. Also, at paragraph 51 Goel appears to disclose that the membrane is made of a non-hydrophilic material, not a hydrophilic material.

With respect to claims 16-18 and 23-24 in particular, in order to address the requirement of a macroporous layer and a microporous layer, the Examiner appears to rely upon the Goel disclosure (paragraph 62) of a non-porous dense upper layer and micro-porous lower layer. A non-porous dense upper layer is not the same thing as a macroporous layer. A macroporous layer requires porosity. A non-porous dense layer requires the absence of porosity. Also, one of ordinary skill in the art would recognize that micro-porous is not the same as macroporous.

With respect to claim 26 in particular, in order to address the requirement of a stack peripherally enveloped by an air-tight film, the Examiner appears to rely upon putatively well-known knowledge in the art, namely, "One in the field would recognize that the sealing could be hermetically sealed by known methods in the art". The claim requires that the stack be peripherally enveloped by an air-tight film, not hermetically sealed. Additionally, an anticipatory reference must disclose the limitation. It is no longer an anticipatory reference if its teaching must be supplemented by other teachings.

Thus, rejection should be withdrawn.

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Second Claim Rejection Under 35 U.S.C. § 102

Claims 15-17, 19, 21-24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (USPN 6,783,882). Applicant respectfully traverses because Schmidt fails to disclose, teach or suggest each of the claim limitations.

With respect to each of claims 15-17, 19, 21-24 and 27, in order to address the limitations of claim 15, the Examiner points to the filter assembly 112. Filter assembly 112 includes, in order, a filter cover 200, first gasket 204, first filter grill 212. filter membrane 220, second filter grill 216, second gasket 208, and side panel 228. The Examiner considers filter cover 200 to be a first structure for distributing a first air flow and side panel 228 to be a second structure for distributing a second air flow. Applicant kindly points out that each of cover 200 and side panel 228 handle a single air flow because the air flow goes through each of the elements making up the filter assembly 112. Also, one of ordinary skill in the art would readily understand that cover 200 and side panel 228 do not distribute air flows within the meaning of the claims. Additionally, the Examiner apparently considers the membrane 220 to correspond to the hydrophilic porous materials required by the claims. In contrast to the claimed hydrophilic porous materials, the filter membrane 220 is explicitly recited as hydrophobic, not hydrophilic. Moreover, fails to see where Schmidt discloses that the membrane exists between a water reservoir contaning the outflow exhaust gas and the inlet flow gas wherein the water reservoir and outflow exhaust gas humidify the inlet gas flow and the membrane exists between them. Rather, based upon FIGS 1-2 and Ins. 35-52 of col. 4 of Schmidt, one of ordinary skill in the art would recognize that the membrane described by the Examiner is disposed within filter 112 which is itself disposed in an opening in enclosure 104, so it is between an exterior and an interior of the Schmidt device. Finally, the Examiner does not address the required claim limitation of at least two transfer subassemblies having a lamellar configuration.

Thus, the rejection should be withdrawn.

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First Claim Rejections Under 35 U.S.C. § 103:

Claims 15-17, 19, 21, 23, 24 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hartnack, et al. (US Pub. No.: 2004/0234833) and Schmidt (USPN 6,783,882). Applicant respectfully traverses because the combination of Hartnack and Schmidt suggested by the Examiner fails to disclose, teach, or suggest all of the claim limitations and because Hartnack and Schmidt teach away from such a combination

The combination of Hartnack and Schmidt suggested by the Examiner fails to disclose, teach, or suggest all of the claim limitations. As described above, Schmidt fails to disclose, teach or suggest hydrophilic porous materials. Rather, the Schmidt membrane is explicitly disclosed as hydrophobic.

Hartnack and Schmidt teach away from the combination suggested by the Examiner. Schmidt teaches a membrane 220 in air filter assembly 112 that is made of a hydrophobic polymer. Hartnacks's membrane 5 is made of a water-permeable material adapted to allow water to permeate from water space 31 to gas space 21. Harnack's membrane is hydrophilic. One of ordinary skill in the art would not look to the field of air filters to find a substitutable membrane for substitution of a water-permeable membrane in a humidification cell. Additionally, such a one would not substitute a hydrophobic membrane for a water-permeable (and inherently hydrophilic) membrane when the goal of the water-permeable membrane is to permeate moisture.

Thus, the rejection should be withdrawn.

Second Claim Rejections Under 35 U.S.C. § 103:

Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmidt (USPN 6,783,882) in view of claim 17 above, and Nuttall, et al. (US Pub. No.: 2005/0112430). Applicant respectfully traverses because Schmidt fails to disclose, teach or suggest all of the claim limitations as discussed above with respect

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to claim 15 and because Nuttall fails to cure the deficiency of Schmidt. Thus, the rejection should be withdrawn.

CONCLUSION

Accordingly, it is believed that the present application now stands in condition for allowance. Early notice to this effect is earnestly solicited. Should the examiner believe a telephone call would expedite the prosecution of the application, he/she is invited to call the undersigned attorney at the number listed below.

Applicant has contemporaneously submitted a Petition for One Month Extension of Time along with the associated fee. Otherwise, it is believed that no other fee is due at this time. If that belief is incorrect, please debit deposit account number 01-1375. Also, the Commissioner is authorized to credit any overpayment to deposit account number 01-1375.

Respectfully submitted,

Date: July 23, 2009, 2009 /Christopher J. Cronin/

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